

Abstract

A device for the optical excitation of laser-active crystals with a diode laser (1) is disclosed. The diode laser (1) generates pump radiation (2), and the laser-
5 active crystal (14) is arranged in a solid-state laser or solid-state laser amplifier. The laser-active crystal (14) has an axis (C) with strong absorption and an axis (A) with weak absorption. The pump radiation (2) from the diode laser (1) is substantially polarised linearly in a
10 privileged polarisation direction. The device is configured in such a way that the pump radiation (2) is injected into the laser-active crystal (14) with a polarisation direction which is oriented parallel to the weak-absorption axis (A). The polarisation of the pump radiation in the vicinity of
15 the laser-active crystal is oriented parallel relative to the weak-absorption axis.

Fig. 2